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REMARKS/ARGUMENTS

In response to the Rejection mailed July 2, 2004, Applicants have amended claim 18xxx and present the following remarks.

Claims 18-22, 25 and 32 were rejected under 35 USC 102(b) as being anticipated by Davis et al. The examiner particularly notes Fig. 5 and has marked up a copy of the figure and urges it to show parallel sides. The handwritten markings point out an *upper region* above the line separating Davis et al area 40, a *middle region* pointed to Davis et al area "40", a *lower region* encompassing part of Davis et al area "40" and all of Davis et al area "22" and a *closed bottom* at the bottom of what Davis et al calls "22". This rejection is respectfully traversed.

The examiner considers the claimed "lower region" to include part of what Davis et al calls the "gripping section 40" and the "upper section 22". See column 4, lines 55-58. Applicants submit that it is an incorrect interpretation of Davis et al. The "lower region" in Davis is the lower tip section 30. The "upper region" is 22. See column 3, lines 18-20. It is an improper interpretation of Davis to conclude that "upper region 20" and part of the gripping region 40 constitute a "lower region" as presently claimed. It is unreasonable to conclude that what the reference considers an "upper region" is the same as a "lower region". For Davis et al to call something an upper region implies that a lower region is also present and that it is somehow different from the upper region. It would be against the teachings in Davis et al to argue that an upper region is a lower region.

Even if one considers Davis et al's "upper region" to be the claimed "lower region", it still does not teach the claimed invention. Column 2, lines 46-49 states "The bore includes an upper section comprising inner walls which taper conically inwardly toward the base of the tube at an included angle of less than 25° ..." This same teaching is repeated in column 4, lines 6-8. Claim 18 requires the lower region to have "parallel inner sides and a closed bottom". A taper conically inward is never parallel. Therefore, even the

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misinterpretation in the rejection does not give one a reference anticipating the present claims.

Still further, the "lower tip region" in Davis et al does not have parallel side walls. Column 3, lines 43-45 states "...wherein the lower section of the bore tapers inwardly toward the base of the tube at a preselected included angle." Thus, neither Davis et al's "lower section" nor "upper section" has parallel side walls and thus cannot be determined to anticipate the present claims requiring parallel side walls in the lower section.

Still further, claim 18 recites a lower region with a "closed bottom". The only possible region in Davis with a "closed bottom" includes the region immediately adjacent to their closed bottom, namely the lower section.

Still further Davis et al specifically teach the general shape of the lower region as a frustum of a cone. See column 3, line 61-64. The tip region is also described as resembling a trapezoidal configuration having two different width measurements and a common height. See column 4, lines 42-51. Thus, it does not have parallel sides in the region adjacent to the closed bottom. All embodiments and all figures in Davis mention and show this general shape for the lower region.

Furthermore, Davis does not teach a middle region having one or more serrations as claimed in claim 19. While the examiner asserts that the "score" in Fig. 1 to be a serration, this is not consistent with the teaching of Davis as explained in the previous response filed March 1, 2004. However, if one persists in calling score 16 a serration then it should be emphasized that this score occurs on the conical shaped tube of Fig. 1 and maybe implied in Fig. 2. Neither tube of Fig. 1 nor Fig. 2 has parallel side walls at any point for any region at all. Therefore, one does not have any disclosure that would anticipate a serration of any type (even one different from the claimed invention) in a tube with parallel side walls at any portion, much less at certain specific claimed regions.

Still further, claim 20 recites that the lower region has the ability to trap an air bubble between two liquids of liquid. Contrary to the examiner's assertion, this is a structural limitation as it prevents the tube from having a structure so large or configured to prevent an

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air bubble from being held. For example a tube five inches wide will not hold an air bubble in an aqueous solution. The lower section of Davis is angled as stated above and is very unlikely to be able to hold an air bubble because the tube sides are not on the sides or top of the air bubble to prevent it from rising by friction. Accordingly, for all of these rejections, the rejection should be withdrawn.

Claim 23 is rejected under 35 USC 103 as being unpatentable over Davis et al as applied above in further view of Simmonds et al. Without agreeing with the rejection, Simmonds et al does not correct for the deficiencies in Davis et al in the initial rejection discussed above or alter the teachings of Davis et al to suggest the recitations in claims 18, 19 and 20 argued above. Accordingly, this rejection should also be withdrawn.

Claim 24 is rejected under 35 USC 103 as being unpatentable over Davis et al as applied above in further view of Sanders et al. Without agreeing with the rejection, Sanders et al does not correct for the deficiencies in Davis et al in the initial rejection discussed above or alter the teachings of Davis et al to suggest the recitations in claims 18, 19 and 20 argued above. Accordingly, this rejection should also be withdrawn.

Claim 30 is rejected under 35 USC 103 as being unpatentable over Davis et al as applied above in further view of Finney et al. Without agreeing with the rejection, Finney et al does not correct for the deficiencies in Davis et al in the initial rejection discussed above or alter the teachings of Davis et al to suggest the recitations in claims 18, 19 and 20 argued above. Accordingly, this rejection should also be withdrawn.

CONCLUSIONS

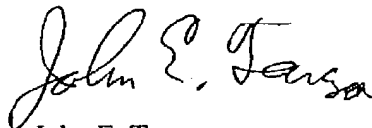
In view of the amendments and comments above, the rejections have been overcome. Reconsideration, withdrawal of the rejections and early indication of allowance are respectfully requested. If any issues remain, the examiner is encouraged to telephone the undersigned.

If needed, applicants petition for an extension of time under the provisions of 37 CFR 1.136(a) for sufficient time to accept this response. The commissioner hereby is

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authorized to charge payment of any fees under 37 CFR § 1.17, which may become due in connection with the instant application or credit any overpayment to Deposit Account No.500933.

Respectfully submitted,



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